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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,603	06/10/2002	Ayman Mokdad	01200.579	2613

7590 07/09/2003  
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Bethesda, MD 20817

EXAMINER

BONCK, RODNEY H

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant(s)

10/089,603

Applicant(s)

MOKDAD ET AL.

Examiner

Rodney H. Bonck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 9, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 5-7, 10-23 and 26-32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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### **DETAILED ACTION**

The following is a first action on the merits of application Serial No.10/089,603, filed June 10, 2002. The preliminary amendment received April 1, 2002 has been entered.

#### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

Receipt is acknowledged of the Information Disclosure Statement filed April 1, 2002. The cited documents have been considered.

#### ***Claim Objections***

Claims 10 and 17 are objected to because of the following informalities: In claim 10, line 1, "according to any one of Claim 1" should be -- according to Claim 1 --. In claim 17, line 4, the word -- due -- is misspelled, *i.e.*, "cue to rotation" should be -- due to rotation --. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There does not appear to be a proper antecedent basis for "the points of articulation of the diaphragm", recited in claim 8. In claim 9, it is not understood what is meant by the recitation that the points of articulation "enable its peripheral portion (10a) to constitute a Belleville ring (B)". This seems to say that the diaphragm (10) forms the assistance ring (B). Clarification is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 1-4, 24, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Lebas et al.('684). The Lebas et al. device discloses a diaphragm clutch including friction linings 20,21, a diaphragm 5, a reaction plate 1, a pressure plate 3, and a cover plate 8. Assistance means is provided in the form of a Belleville ring 6 which cooperates with the diaphragm so that the load exerted by the diaphragm on the pressure plate is substantially constant regardless of the degree of wear of the friction linings. Assistance ring 6 bears on diaphragm 5 and on cover plate 8 so as to be under stress at least when the clutch is disengaged. When the clutch is engaged and the linings are new the assistance ring applies a light or zero force on the diaphragm and applies no force to the diaphragm when the clutch is disengaged. Rivet 26, between the cover plate and the assistance ring, can be considered the centering means insofar as defined in these claims. The assistance ring bears on the cover plate regardless of the position of the clutch. Regarding claim 25, rivets 26 can also be considered the claimed abutment elements insofar as defined here.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Weidinger('881). Weidinger discloses a diaphragm clutch including friction linings 23, a diaphragm 9, a reaction plate 16, a pressure plate 3, and a cover plate 2. Assistance means is provided in the form of a Belleville ring 4 which cooperates with the diaphragm so that the load exerted by the diaphragm on the pressure plate is substantially constant regardless of the degree of wear of the friction linings. Assistance ring 4 (Fig. 1) bears on diaphragm 9 and on cover plate 2 so as to be under stress at least when the clutch is

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disengaged. When the clutch is engaged and the linings are new the assistance ring applies a light or zero force on the diaphragm.

***Allowable Subject Matter***

Claims 5-7, 10-23, and 26-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8 and 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

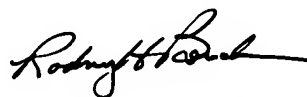
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lopez('669), Link et al.('921), Mizukami et al.('887), Tojima et al.('829), Nagano('708), and Maucher('365) show other clutch mechanisms with assistance rings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (703)-308-2904. The examiner can normally be reached on Monday-Friday 7:30AM - 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703)-308-0830. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-305-3597 for regular communications and (703)-305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1113.



Rodney H. Bonck  
Primary Examiner  
Art Unit 3681

rhb  
July 1, 2003